

Evocations that haunt the computer interface

Chris Chesher, PhD

Senior Lecturer in the Digital Cultures program at the University of Sydney, Australia. His research interests are at the intersection of digital media and society, including virtual reality, digital spatial media, social robotics, smart city, mobile media and computer games. He has published in journals such as *New Media & Society*, *Convergence*, *International Journal of Social Robotics*, *Continuum*, and *Media International Australia*. His forthcoming book *Invocational Media: Reconceptualising the Computer* will be published in 2023. chris.chesher@sydney.edu.au.

Abstract: Although computers are rationalist, they recall the occult in answering users' invocations with evocations. Invocations call non-humans for signs during crises. Outputs are evocative signs with affective impact and meaning. While legacy media are evocative, transporting or broadcasting signs, invocational media creates networked cybernetic relations in a lively quasi-magical communication. This article evaluates the evocative intensity of two invocational works that recall the mystical heritages of technology: Silent Hill, a horror video game series, and Ai-Da, a robot artist.

Keywords: invocation, evocation, digital media, robotic art, computer games.

As evocações que assombram a interface do computador

Resumo: Embora os computadores sejam racionalistas, eles lembram o ocultismo ao responder às invocações dos usuários com evocações. As invocações chamam os não humanos para sinais durante as crises. Os *outputs* são signos evocativos com impacto afetivo e significado. Enquanto a mídia legada é evocativa, transportando ou transmitindo sinais, a mídia invocativa forma relações cibernéticas em rede em uma comunicação viva quase mágica. Este artigo examina a intensidade evocativa de duas obras invocativas que relembram as heranças místicas da tecnologia: a série de *videogames* de terror Silent Hill e o artista robô Ai-Da.

Palavras-chave: invocação, evocação, mídia digital, arte robótica, jogos de computador.

Las evocaciones que rondan la interfaz del ordenador

Resumen: Si bien las computadoras son racionalistas, recuerdan lo oculto al responder a las invocaciones de los usuarios con evocaciones. Las invocaciones llaman a los no humanos en busca de señales durante las crisis. Las salidas son signos evocativos con impacto afectivo y significado. Mientras que los medios heredados son signos evocadores, de transporte o de difusión, los medios de invocación forman relaciones cibernéticas en red en una comunicación viva casi mágica. Este artículo examina la intensidad evocadora de dos obras invocativas que recuerdan las herencias místicas de la tecnología: la serie de videojuegos de terror Silent Hill y el robot artista Ai-Da.

Palabras clave: invocación, evocación, medios digitales, arte robótico, juegos de computadora.

Computers complicate our relationships with text, images, and sound, dematerializing them, copying, transforming, and transporting them indefinitely, outputting them on a tiny or gigantic scale, making them intimate, interactive, tactile, disturbing, immersive, or spectacular. While these powers of digital media are outcomes of rationalist engineering, they also retain a tinge of the occult and are characterized by their mediation of invocations and evocations. Invocation is the act of calling upon a higher power for immediate assistance or support, while evocation is the summoning into perceptible form of spirits, images, and presences, with cognitive, affective and emotional impact. Input devices are mediators of invocations, which allow programmers and users to articulate commands to summon data stored in memory and calculations. Output devices are articulators of evocations: sensations and feelings that computers have called into existence based on immediate inputs and stored invocations.

Therefore, digital media are both invocational and evocational and, thus, descendants of the 19th-century and early-20th-century media technologies that spooked polite society by conjuring the nonexistent, the marvelous, and the affective: the magic lantern, the photograph, the telegraph, and the gramophone (Marvin 1988; Leeder 2017; During, 2002). In phantasmagoria performances, which became popular from 1790s, audiences were confined, drugged, and exposed to projected images of ghosts and monsters accompanied by eerie music and sound effects (During, 2002). Seances claimed to provide evidence of actual supernatural phenomena by invoking the dead, with raps and knocks evoking their presence. Similarly, practitioners of spirit photography claimed to have captured images of spirits of the dead using this uncanny new method (During, 2002). These practices coincided with the emergence of British Gothic novels (Tatar, 1981) with still familiar tropes of darkness, isolation, hauntings, madness, dreams, disease, superstition, and eroticism (Cavallaro, 2002). At the same time, clockwork automata mimicked the form and movement of living human and animal bodies to achieve a marvelous and uncanny effect.

The emergence of audiovisual and broadcast media in the 20th century as “mass media” was based not only on communication but on the evocation of sensations and feelings. Cinema, radio, and television competed and collaborated to find their own forms: spectacular, intimate, and domesticated, respectively. The 20th-century media retained traces of the 19th century: gothic tropes could be heard in radio drama and later, in the imagery and narratives of horror movies and science fiction. Certain treatments of news were often disparaged as “sensational.” Medical practices became one among many topics of television documentaries. However, each media form had a bias towards evocation (rather than invocation) and was characterized by a centralized production and a linear textual form.

For its first 30 years, the invocational medium of computers primarily invoked data from memory and calculations, with minimal evocational impact. As opposed to mass media, which privileged evocation, computers lacked balance by prioritizing invocation. From the 1960s, however, experimental art, video game, and later multimedia offered glimpses of the possibilities of invocational media balancing the relationship between invocation and evocation. Evocations began with digital media’s output devices: speakers, screens, projectors, and other equipment that produce illusions and evoke feelings in their users. Turkle (2004) describes computers in a gothic manner, as “an evocative object, an object that fascinates, disturbs equanimity, and precipitates thought” (p. 19). However, evocation is paired with invocations: the automated summoning of meanings and sensations from memory and calculations at any moment. Where classical evocations summon spirits, evocational media sometimes produce understandings and sensations that lead to various forms of affect: surprise, delight, shock, anxiety, anger, fear, or a sense of the uncanny. Evocation exceeds communication. It is beyond connotation, which lacks and is implied in a message. On the contrary, it is the individuated and embodied forms of intensity that provoke resonances aligned with identity and psychology, recalling gothic modes and entering the domains of the sublime. In our everyday contact with incomprehensively complex computing machines, we accept that their evocations exceed our understanding and deceive our senses. However, with their instrumental convenience, we often forget their marvelous origins.

To recover a sense of the evocative in digital media, I will examine two digital works that show the dynamics of invocation and evocation: *Silent Hill*, the horror video game series, and Ai-Da, the uncanny robot artist. These relatively unusual examples are characterized by a certain intensification of the experiences of users with their evocation of fear, the uncanny and the abject—feelings that are usually sublimated in the everyday contact with invocational media. In each case, what is summoned is sometimes disturbing or at least intriguing. Moreover, both works recall the gothic.

***Silent Hill* and the evocation of fear**

The *Silent Hill* video game series belongs to the “survival horror” genre and evokes a playful sense of terror similar to cinematic horror by intentionally obscuring and withholding salient features of its world and narrative before revealing victims and monsters in shocking scenes of horror and fear. In the game, the players’ experience with grotesque images and the distressing soundscape is enhanced by their limited invocational control over the unfolding of scenes (Perron, 2012). Players are responsible for controlling the central character, but part of the horror experience includes limiting their perception, physical capacities, and weapons. In the first *Silent Hill*, the protagonist Harry Mason stumbles through a town hidden by mist and darkness, looking for his daughter who has mysteriously disappeared. He is no soldier or superhero, but an everyman. On this journey, he encounters hostile enemies, who threaten the avatar’s body and, therefore, the player’s body (Kirkland, 2012). To avoid in-game death, players must escape from or fight these enemies, which include nightmarish monsters: flying pterodactyl-like air screamers, faceless grey children that attempt to hug their legs, and puppet nurses wielding scalpels. The game does not make it clear whether the experience takes place in a real world or a nightmare. Players also travel to the abject parallel Otherworld, which is “characterized by blood, excrement, vomit and other bodily fluids” (Kirkland, 2012, p. 108), and besides confronting monsters, they uncover evidence of past violence, solve puzzles, and decipher a narrative backstory.

The role of media technologies inside the world of *Silent Hill* is another distinctive feature, as they extend players’ perception despite their unreliability, creating a sense of menace and threat. In one of the first scenes in the first game, players find a radio that crackles with static when a monster is close. It serves as an indexical signifier that also overwhelms the soundscape. *Silent Hill 3* has no radios, but when enemies are approaching, scratches similar to a damaged film appear on the screen. For Daniel (2020) there is a longstanding association between media technologies and horror.

Horror as a genre, however, has never been contained within a predominant media form. Instead, it has historically infected both emerging forms and the technologies which deliver them, parasitically preying upon the fears that emerge from these developments. (Daniel, 2020, p. 1)

Denson (2020) states that the experience of technically mediated modes of perception is disturbing, especially when they break down: “post-cinematic horror trades centrally on a slippage between diegesis and medium; the fear that is channelled through moving-image media is in part also a fear of (or evoked by) these media” (Denson, 2020, p. 154). The oscillation between the immediacy of sensory extension and its breakdown is characteristic of what Olivier refers to as the glitch gothic: “The glitch is the semi-opaque counterpart to the terror of transparent vision. A digital glitch stuns the viewer through the sudden opacity of a medium designed for transparency” (Olivier, 2015, p. 259).

This survival horror computer game exemplifies intensities that are inherent in many experiences with invocational media technologies. We have all experienced that mysterious junction between the seamless operation and unexplained failure of computers: the moment when our urgent invocations are unanswered by the fickle and obscure powers of the digital non-human. A different sense of invocation appears in the avatar of the humanoid robot, which can summon ambivalent and gothic experiences that are often referred to as uncanny.

Ai-Da and the evocation of art and artist

The second example I want to discuss Ai-Da, a machine billed as the world's first ultra-realistic A.I. robot artist. This machine was first shown to the public at the exhibition *Unsecured futures* at St John's College at Oxford University in June 2019¹, where she was given the pronouns she/her. She was commissioned by Aidan Meller in his Oxford gallery and built by Cornwall-based Engineered Arts on the Mesmer platform². Her first drawing arm and AI algorithms were created by undergraduate students in Leeds (School of Electronic and Electrical Engineering News, 2021). Ai-Da could create portraits using cameras behind her eyes to capture the object and a mechanical arm to draw scratchy pencil marks on paper. In 2022, she received a more advanced robot arm, which could wield a paintbrush³, taking five hours to create "mind-blowing" paintings⁴. She can also use customized AI language models to compose poetry⁵ that impressed the British poet Carol Rumens, who stated: "I think there's hope for the robot-poet"⁶. She can perform and make speeches. She also claims to be a performance artist, apparently inspired by Yoko Ono.

¹ <https://bit.ly/3jnnSk1>

² <https://bit.ly/40tcmUC>

³ <https://bit.ly/3Yo8N07>

⁴ <https://bit.ly/3HW5Heo>

⁵ <https://bit.ly/3wQB2sM>

⁶ <https://bit.ly/3wQB2sM>

⁷ <https://bit.ly/3l5pZth>

When presenting Ai-Da as an artist, museum director and art dealer Aidan Meller⁷ performed several invocations. He rhetorically invoked the social role or persona of an artist by giving her a name that alludes to the famous 19th-century mathematician and Babbage collaborator Ada Lovelace. The robot artist looked both to the past and future: the centuries-old tradition of automata and the currently fashionable technology of artificial intelligence. At the same time, Meller gathered funding, people, equipment, and software to invoke robotic movements and speech that evoked illusions of life. Some of these invocations were to hardware and software, but "Wizard of Oz" techniques were also used and human operators would perform the robot's conversation. Most notably, Ai-Da, at least sometimes, adopted the uncredited voice of Meller's partner and collaborator Lucy Seal (Januszczak, 2019).

⁸ <https://bit.ly/3RwE5jx>

In many ways, Ai-Da is provocative as concept art⁸, raising longstanding questions about the possibility of machines being creative (a question that Turing raised in 1950). In public statements, Ai-Da states that she lacks emotions, but her work could still be considered creative: "In regards creativity, using academic professor Margaret Boden's criteria, I am creative because my work is new, surprising and has value, as it is stimulating debate and interest"⁹.

⁹ <https://bit.ly/3JDFOBI>

¹⁰ <https://bit.ly/3HxVjbo>

In the widespread media coverage of Ai-Da, her persona as an artist is almost always accepted¹⁰. Alongside several other well-known realistic robots—including Hanson Robotics' Sophia, Hiroshi Ishiguro's Geminoid series, and Realbotix's AI sex robot Harmony—Ai-Da has achieved some fame. She is different from these other robots because she is both artwork and artist, evoking an uncanny sense of posthuman ambiguity, but also recalling stagecraft and the piquant pleasure of technological deception (Coeckelbergh, 2019). Just as many artists, much of Ai-Da's work is in self-promotion. She has been interviewed on chat shows and presented a TEDxOxford talk, speculating about the status of her own creative practice¹¹. A number of news reported that en route to a show at the pyramids in Egypt in 2021, she was delayed in Customs supposedly on suspicion that she was a spy¹². She went to Venice Giardini during (but not for) the 2022 Venice Biennale¹³. Where robots are often considered uncanny, Ai-Da is in fact quite canny.

¹¹ <https://bit.ly/3WWdtcN>

¹² <https://bit.ly/3JHayBB>

¹³ <https://bit.ly/3YDGmvF>

Conclusion

This paper has shown how digital media retain strong traces of gothic tropes from the 19th century, stating that the design of computers can be usefully reconceptualized as invocations (created by input devices) and evocations (expressed by outputs). These concepts avoid giving primacy to images, sounds, or screens, and focuses on the performativity of events, by which these media become present in the interface. Evocations emerge in many forms: information spaces like radar; screen images like photographs or cinema; mirrors in spectral selfies; immersive virtual worlds; tactile surfaces of smartphone touchscreens; uncanny robot faces and arms; new media art works; artificial life environments; and many other assemblages and experiences. All these effects come from acts of invocation that may be attributed to users, programmers, or non-humans, sometimes from indeterminate locations in space and time.

References

- Cavallaro, D. (2002) *The gothic vision: Three centuries of horror, terror, and fear*. Continuum.
- Coeckelbergh, M. (2019). *Moved by machines: Performance metaphors and philosophy of technology*. Routledge. <https://doi.org/10.4324/9780429283130>
- Daniel, A. J. (2020). *Affective intensities and evolving horror forms: From found footage to virtual reality*. Edinburgh University Press.
- Denson, S. (2020) *Discorrelated images*. Duke University Press.
- During, S. (2002). *Modern enchantments: the cultural power of secular magic*. Harvard University Press. <https://doi.org/10.4159/9780674034396>
- Januszczak, W. (2019) I'm looking at the future — and she's no Frida Kahlo. *The Sunday Times*, 2 June 2019. <https://bit.ly/3Wg6xa7>
- Kirkland, E. (2012) Gothic videogames, survival horror, and the Silent Hill series. *Gothic Studies*. 14(2) pp. 106–122. <http://dx.doi.org/10.7227/GS.14.2.8>
- Leeder, M. (2017). *The modern supernatural and the beginnings of cinema*. Palgrave Macmillan UK.
- Marvin, C. (1988). *When old technologies were new: Thinking about electric communication in the late nineteenth century*. Oxford University Press.
- Olivier, M. (2015) Glitch Gothic. In: Leeder, M. (Ed.) *Cinematic ghosts: haunting and spectrality from silent cinema to the digital era*, pp. 253–270.
- Perron, B. (2012). *Silent Hill: The terror engine*. University of Michigan Press.
- Stephens, E. & Heffernan, T. (2016) We have always been robots: The history of robots and art In: Heratch, D., Kroos, C. & Stelarc. *Robots and art: Exploring an unlikely symbiosis*. Springer.
- Tatar, M. M. (1981). The houses of fiction: Toward a definition of the uncanny. *Comparative Literature*, 33(2), 167–182.
- Turkle, S. (2011) *Alone together: Why we expect more from technology and less from each other*. Basic Books.